

No.

200000266



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Seminis Vegetable Seeds, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

LETTUCE

'PS 6545691'

*In Testimony Whereof, I have hereunto set my hand
and caused the seal of the Plant Variety
Protection Office to be affixed at the City of
Washington, D.C. this nineteenth day of April, in
the year two thousand and five.*

Attest:

Re m Ze

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Phil Johnson

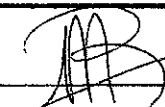
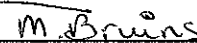
Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER Seminis Vegetable Seeds, Inc.		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME PSR 4569		3. VARIETY NAME 'PS 6545691' JRM 1/2/00	
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) 37437 State Highway 16 2700 Camino del Sol Woodland, CA 95695 Oxnard, CA RAO 5/29/02 93030-7967		5. TELEPHONE (include area code) (530) 669-6172		FOR OFFICIAL USE ONLY PVPO NUMBER 200000266	
6. FAX (include area code) (530) 666-6791		9. DATE OF INCORPORATION 1962		FILING DATE 6/5/00	
7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.)		8. IF INCORPORATED, GIVE STATE OF INCORPORATION California		FILING AND EXAMINATION FEES: \$ 2450 DATE 6/5/00 CERTIFICATION FEE: \$ 432.00 DATE 3/31/2005	
10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers)					
Sharen Chaffin Seminis Vegetable Seeds, Inc. 37437 State Hwy 16 Woodland CA 95616				Marcel Bruins Seminis Vegetable Seeds, Inc. Nude 54D 6702 DN Wageningen The Netherlands mbruins@svseeds.nl Ph: 31 317 450218 Fax: 31 317 450217	
11. TELEPHONE (include area code) 31 317 450218		12. FAX (include area code) 31 317 450217		13. E-MAIL mbruins@svseeds.nl	
14. CROP KIND (Common Name) Lettuce		15. GENUS AND SPECIES NAME OF CROP Lactuca Sativa L.		16. FAMILY NAME (Botanical) Asteraceae	
17. IS THE VARIETY A FIRST GENERATION HYBRID? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO					
18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)			19. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? See Section 83(a) of the Plant Variety Protection Act		
a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,450), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)			<input checked="" type="checkbox"/> YES (If "yes", answer items 20 and 21 below) <input type="checkbox"/> NO (If "no," go to item 22)		
			20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
			21. IF "YES" TO ITEM 20, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED		
22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)			23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)		
24. The owners declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate. The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.					
SIGNATURE OF OWNER 			SIGNATURE OF OWNER 		
NAME (Please print or type) Seminis Vegetable Seeds			NAME (Please print or type)		
CAPACITY OR TITLE Manager, Plant Variety Protection		DATE 6 June 2000		CAPACITY OR TITLE DATE	

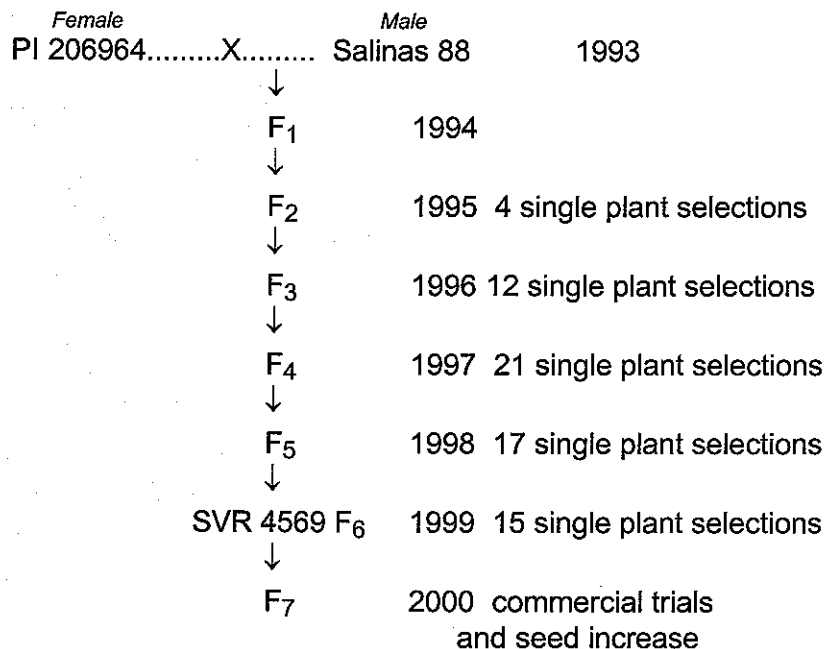
200000266

Exhibit 16A. Origin and Breeding History of Lettuce SVR 4569

'PS 6545691'

MAH
3/31/05

Pedigree of SVR 4569



SVR 4569 originated in 1993 with the cross PI 206964 by Salinas 88. Single plant selections were made in subsequent years in the area of intended commercialization. By F₆ a group of 15 families was judged uniform and bulked for trialing and seed increase. An F₇ mass is in trial this year (2000) and an increase of F₇ seed is being produced in the San Joaquin Valley of California, as well.

The breeding work was carried out by Dr. William Waycott at the Petoseed Company's Research Station at Arroyo Grande, California. Petoseed Company was purchased by Seminis Vegetables Seeds, Inc. in 1995, and the work continued by the same staff at the Arroyo Grande location until the present. Some test plots were conducted in 1999, while replicated field trials are being carried out in most production areas throughout coastal and desert growing districts of California and Arizona during the year 2000.

The breeding method employed was pedigree selection, using both single plant selection and mass selection practices. The selection criteria for SVR 4569 were:

1. identify a cultivar with the outer appearance of a romaine, but with internal characteristics of an iceberg (crisphead), such as color, texture, taste, and density,
2. dark outer color with blanched inner color, and
3. resistance to corky root rot and lettuce mosaic virus.

Thus far in trials of SVR 4569 during the last six years covering generations F₆ to F₁₂, we have seen neither genetic variants nor off-types in more than 9,000 plants, indicating that this variety is genetically uniform and stable.

Due to its unique characteristics, PSR 4569 is described as a new type of lettuce ideally suited for the America fresh vegetable industry. PSR 4569 has the external dimensions (shape and stature) of a romaine variety, but its internal qualities all come from its crisphead background. The internal makeup of PSR 4569 is decidedly crisphead, exhibited by its thick, crisp interior leaves, its tight head conformation, interior pale color, and a distinct iceberg taste. Potentially mistaken as a romaine cultivar, PSR 4569 is clearly a crisphead in all aspects except for its shape. PSR 4569 is adapted to both coastal and desert production areas of California and Arizona. It is susceptible to all California pathotypes of downy mildew, however, it contains the mo gene conferring resistance to lettuce mosaic virus, and the cor gene conferring resistance to corky root rot, strain CA1. When compared to the commercially available cultivars of romaine and crisphead grown in USA, PSR 4569 is clearly distinctive and for this reason was selected because of its unique external and internal qualities, as well as for the disease resistances listed above.

Phenotypically, PSR 4569 is distinct from all commercial cultivars of lettuce, however, since its outer appearance resembles a romaine, the cultivar Clemente was selected as the most similar cultivar for comparison. In replicated field trials, heads of PSR 4569 were narrower, shorter, but heavier than Clemente, and had shorter core lengths at harvest time (Table 1). The exterior leaf color of PSR 4569 was darker (RHC color chart 146A), versus 146B for Clemente, while the interior leaf color of PSR 4569 was lighter (144A) versus 146B for Clemente. Leaf thickness of the largest leaf measured at 1.1 mm for PSR 4569 and 0.6 mm for Clemente. From these diverse indicators, PSR 4569 clearly represents a new and unusual combination of romaine and crisphead characters in one lettuce variety.

MDH
3/31/2005

'PS 6545691'

1

Table 1. Evaluation of PSR-4569 and the most similar cultivar, Clemente, for several important characters.

Trial No	Cultivar	Rep No.	Exter. Leaf Color ^a	Inter. Leaf Color ^b	Corky Root Resist. ^c	Lettuce Mosaic Resist. ^d	Plant Height ^e	Head Diam. ^f	Leaf Head Weight ^g	Thickness ^h	No. of Days to 15 cm ⁱ
Trial 1: Evaluated: 16 Sep 99 Santa Maria Valley, CA	PSR-4569 PS 6545691	Rep. 1	146A	144A	Resist.	Resist.	26.1±0.9	17.3±2.1	1350±9.9	1.0±0.1	65
		Rep. 2	146A	144A	Resist.	Resist.	26.9±0.8	17.0±2.7	1305±9.7	1.1±0.2	66
		Average:	146A	144A	Resist.	Resist.	27.5±0.9	17.2±2.4	1328±9.8	1.1±0.2	66
Trial 2: Evaluated: 8 Feb 2000 Yuma, AZ	PSR-4569 PS 6545691	Rep. 1	146B	146B	Resist.	Resist.	28.1±1.1	24.8±2.7	876±10.5	0.6±0.1	61
		Rep. 2	146B	146B	Resist.	Resist.	27.8±1.3	23.6±2.3	802±10.3	0.7±0.1	60
		Average:	146B	146B	Resist.	Resist.	28.0±1.2	24.2±2.5	839±10.4	0.7±0.1	61
Clemente:	Clemente:	Rep. 1	146A	144A	Resist.	Resist.	26.5±0.7	18.5±2.8	1271±10.1	1.1±0.1	65
		Rep. 2	146A	144A	Resist.	Resist.	27.0±0.9	18.9±1.8	1350±9.7	1.0±0.2	66
		Average:	146A	144A	Resist.	Resist.	26.8±0.8	18.7±2.3	1311±9.9	1.1±0.2	66
Clemente:	Clemente:	Rep. 1	146B	146B	Resist.	Resist.	29.5±1.4	23.6±3.1	840±9.3	0.7±0.1	62
		Rep. 2	146B	146B	Resist.	Resist.	29.2±1.0	24.2±2.0	734±10.1	0.6±0.1	60
		Average:	146B	146B	Resist.	Resist.	29.4±1.2	23.4±2.6	787±9.7	0.7±0.1	61

^a Exterior leaf color evaluation was done on the first large, mature leaf using the Royal Horticultural Society color chart, U.K.

^b Interior leaf color evaluation was done on the twenty-fifth mature leaf from the outside using the Royal Horticultural Society color chart, U.K.

^c Corky root rot survey of using five replications, each having 25 roots from plants grown in field trials in Monterey and Santa Maria Counties, CA, evaluated between September and February of 1999 and 2000.

^d Lettuce mosaic virus survey using two replications each having 40 seedlings, grown in laboratory screens.

^e Mean plant height using two sowing dates of 20 plants per replication in cm ± standard deviation.

^f Mean head diameter using two sowing dates of 20 plants per replication in cm ± standard deviation.

^g Mean head weight using two sowing dates of 20 plants per replication in grams ± standard deviation.

^h Mean leaf thickness of the leaf margin of the largest leaf using two sowing dates of 10 plants per replication in mm ± standard deviation.

ⁱ Mean number of days until stem reaches 15 cm using two replications of 20 plants each.

200000266

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE DIVISION
OBJECTIVE DESCRIPTION OF VARIETY
LETTUCE *Lactuca sativa*

EXHIBIT

NAME OF APPLICANT (S) <u>Seminis Vegetable Seeds, Inc.</u> ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) 87437 State H 37437 State Hwy 16 Woodland CA 95695	FOR OFFICIAL USE ONLY PVPO NUMBER <u>200000266</u> VARIETY NAME <u>PS 6545691</u> PSR 4569 EXPERIMENTAL DESIGNATION
--	---

Place numbers in the boxes for the characters which best describe this variety. Measured data should be the mean of an appropriate number (at least 10) of well spaced plants. Royal Horticultural Society or any recognized color standard may be used to determine plant colors.

The location of the test area is:

Color System Used:

ROYAL HORTICULTURAL SOCIETY

1. PLANT TYPE: (See list of suggested check varieties page 4.)

04

01=Cutting/Leaf

02=Butterhead

03=Bibb

04=Cos or Romaine

05=Great Lakes Group

06=Vanguard Group

07=Imperial Group

08=Eastern (Ithaca) Group

09=Stem

10=Latin

11=OTHER

2. SEED:

COLOR

1=White (Silver Gray)

2=Black (Gray Brown)

3=Brown (Amber)

LIGHT DORMANCY

1=Light Required

2=Light Not Required

HEAT DORMANCY

1=Susceptible

2=Not Susceptible

2

2

1

3. COTYLEDON TO FOURTH LEAF STAGE: NOTE: Provide a color photograph or photocopy of the fourth leaf from 20 day old seedling grown under optimal conditions.

3

SHAPE OF COTYLEDONS:

1=Broad

2=Intermediate

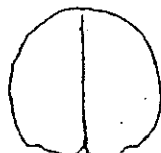
3=Spatulate

4

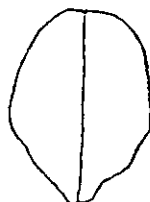
SHAPE OF FOURTH LEAF:



1



2



3



4



5



6

25

LENGTH/WIDTH INDEX OF FOURTH LEAF: $L/W \times 10$

4

APICAL MARGIN:

1=Entire

2=Crenate/Gnawed

3=Finely Dentate

4=Moderately Dentate

5=Coarsely Dentate

6=Incised

7=Lobed

8=OTHER (specify)

5

BASAL MARGIN:

2

UNDULATION:

1=Flat

2=Slight

3=Medium

4=Marked

4

GREEN COLOR:

1=Yellow Green

2=Light Green

3=Medium Green

4=Dark Green

5=Blue Green

6=Silver Green

7=Gray Green

ANTHOCYANIN:

1

DISTRIBUTION:

1=Absent

2=Margin Only

3=Spotted

4=Throughout

5=OTHER (specify)

-

CONCENTRATION:

1=Light

2=Moderate

3=Intense

1

ROLLING:

1=Absent

2=Present

1

CUPPING:

1=Uncupped

2=Slight

3=Markedly

1

REFLEXING:

1=None

2=Apical Margin

3=Lateral Margins

5

4. MATURE LEAVES (observe harvest-mature outer leaves):

NOTE: Provide color photo of harvest-mature leaves which accurately shows color and margin characteristics.

200000266

MARGIN:

<input type="checkbox"/> 2	INCISION DEPTH: <i>(deepest penetration of the margin)</i>	1=Absent/Shallow (Dark Green Boston)	2=Moderate (Vanguard)	3=Deep (Great Lakes 659)
<input type="checkbox"/> 2	INDENTATION: <i>(finest divisions of the margin)</i>	1=Entire (Dark Green Boston)	3=Deeply Dentate (Great Lakes 659)	5=OTHER <i>(specify)</i>
		2=Shallowly Dentate (Great Lakes 65)	4=Crenate (Vanguard)	
<input type="checkbox"/> 2	UNDULATION OF THE APICAL MARGIN:	1=Absent/Slight (Dark Green Boston)	2=Moderate (Vanguard)	3=Strong (Great Lakes 659)
<input type="checkbox"/> 4	GREEN COLOR:	1=Very Light Green (Bibb)	3=Medium Green (Great Lakes)	5=Very Dark Green
		2=Light Green (Minetto)	4=Dark Green (Vanguard)	6=OTHER
ANTHOCYANIN (grown at or below 10 C):				
<input type="checkbox"/> 1	DISTRIBUTION:	1=Absent	3=Spotted (Calif. Cream Butter)	5=OTHER <i>(specify)</i>
		2=Margin Only (Big Boston)	4=Throughout (Prize Head)	
<input type="checkbox"/> -	CONCENTRATION:	1=Light (Iceberg)	2=Moderate (Prize Head)	3=Intense (Ruby)
<input type="checkbox"/> 3	SIZE:	1=Small	2=Medium	3=Large
<input type="checkbox"/> 2	GLOSSINESS:	1=Dull (Vanguard)	2=Moderate (Salinas)	3=Glossy (Great Lakes)
<input type="checkbox"/> 1	BLISTERING:	1=Absent/Slight (Salinas)	2=Moderate (Vanguard)	3=Strong (Prize Head)
<input type="checkbox"/> 3	LEAF THICKNESS:	1=Thin	2=Intermediate	3=Thick
<input type="checkbox"/> 2	TRICHOMES:	1=Absent (smooth)	2=Present (spiny)	

5. PLANT (at market stage. Choose a comparison variety appropriate for this type.):

SPREAD OF FRAME LEAVES:

☐ 33 cm This Variety ☐ 40 cm CLEMENTE *(specify comparison variety)*

HEAD DIAMETER (market trimmed with single cap leaf):

☐ 18 cm This Variety ☐ 24 cm CLEMENTE *(specify comparison variety)*

<input type="checkbox"/> 4	HEAD SHAPE:	1=Flattened	3=Spherical	5=Non-Heading
		2=Slightly Flattened	4=Elongate	6=OTHER

<input type="checkbox"/> 3	HEAD SIZE CLASS:	1=Small	2=Medium	3=Large
----------------------------	------------------	---------	----------	---------

☐ 24 HEAD COUNT PER CARTON

HEAD WEIGHT:

☐ 1320 g This Variety ☐ 813 g CLEMENTE *(specify comparison variety)*

<input type="checkbox"/> 4	HEAD FIRMNESS:	1=Loose	3=Firm
		2=Moderate	4=Very Firm

6. BUTT (bottom of market-trimmed head):

<input type="checkbox"/> 3	SHAPE:	1=Slightly Concave	2=Flat	3=Rounded
----------------------------	--------	--------------------	--------	-----------

<input type="checkbox"/> 3	MIDRIB:	1=Flattened (Salinas)	2=Moderately Raised	3=Prominently Raised (Great Lakes 659)
----------------------------	---------	-----------------------	---------------------	--

7. CORE (stem of market-trimmed head):

☐ 45 mm Diameter at base of head☐ 7.3 Ratio of head diameter/core diameter

Core height from base of head to apex:

☐ 57 mm This Variety ☐ 83 mm CLEMENTE *(specify comparison variety)*

8. BOLTING (Give First Water Date 12 MAY 98):

NOTE: First Water Date is the date seed first receives adequate moisture to germinate. This can and often does equal the planting date.

Number of days from First Water Date to seed stalk emergence (summer conditions):

☐ 66 This Variety ☐ 61 CLEMENTE *(specify comparison variety)*

<input type="checkbox"/> 3	BOLTING CLASS:	1=Very Slow	3=Medium	5=Very Rapid
		2=Slow	4=Rapid	

Height of mature seed stalk:

☐ 116 cm This Variety ☐ 85 cm CLEMENTE *(specify comparison variety)*

48

Spread of Bolter Plant (at widest point):

cm This Variety

48

cm

CLEMENTE

(specify comparison variety)

200000266

2

BOLTER LEAVES:

1=Straight

2=Curved

1

MARGIN:

1=Entire

2=Dentate

2

COLOR:

1=Light Green

2=Medium Green

3=Dark Green

BOLTER HABIT:

2

TERMINAL INFLORESCENCE:

1=Absent

2=Present

2

LATERAL SHOOTS:
(above head)

1=Absent

2=Present

1

BASAL SIDE SHOOTS:

1=Absent

2=Present

9. MATURITY (earliness of harvest-mature head formation):

NOTE: Complete this section for at least one season.

SEASON	Applic. 1/ # of days	Check 1/ # of days	CHECK VARIETY 2/
Spring	120	105	CLEMENTE
Summer	72	62	CLEMENTE
Fall	84	73	CLEMENTE
Winter	102	90	GREEN TOWERS

Give planting date(s), and location(s):

Spring

CENTRAL CALIFORNIA COAST

15 JANUARY TO 15 AUGUST

Summer

Fall

Winter

IMPERIAL VALLEY, CA, YUMA, AZ

1 OCTOBER TO 15 DECEMBER

1/ First water date to harvest.

2/ Fill in check variety name on the appropriate line.

10. ADAPTATION:

PRIMARY REGIONS OF ADAPTION (tested and proven adapted):

(0=Not tested

1=Not Adapted

2=Adapted)

2

Southwest (Calif., Ariz. desert)

2

West Coast

0

Northeast

0

Northcentral

0

Southeast

0

OTHER

SEASON:

2

Spring (area)

CENTRAL CALIF. COAST

2

Fall (area)

CENTRAL CALIF. COAST

2

Summer (area)

CENTRAL CALIF. COAST

2

Winter (area)

IMPERIAL VALLEY, CA, YUMA, AZ

0

GREENHOUSE:

0=Not tested

1=Not Adapted

2=Adapted

1

SOIL TYPE:

1=Mineral

2=Organic

3=Both

11. DISEASES AND STRESS REACTIONS (0=Not tested; 1=Susceptible; 2=Intermediate; 3=Resistant; 4=Highly resistant; 5=Tolerant):

VIRUS

- ☒ 1 Big Vein
☒ 3 Lettuce Mosaic
☐ 0 Cucumber Mosaic
☐ 0 Broad Bean Wilt
☐ 0 Turnip Mosaic
☐ 0 Beet Western Yellows
☐ 0 Lett. Infectious Yellows
☐ Other Virus _____

FUNGAL/BACTERIAL

- ☐ 0 Corky Root Rot (Pythium Root Rot)
☐ 0 Downy Mildew (Races _____)
☐ 0 Powdery Mildew
☐ 0 Sclerotinia Rot
☐ 0 Bacterial Soft Rot (Pseudomonas spp. & others)
☐ 0 Botrytis (Gray Mold)
☒ 3 OTHER Rhizomonas suberitaciens

INSECTS

- ☐ 0 Cabbage Loopers
☐ 0 Root Aphids
☐ 0 Green Peach Aphid
☐ Other Insect _____

PHYSIOLOGICAL/STRESS

- ☒ 2 Tipburn
☒ 2 Heat
☐ 0 Drought
☒ 2 Cold
☐ 0 Salt
☐ 0 Brown Rib (Rib Discoloration, Rib Blight)
☐ OTHER _____

POST HARVEST

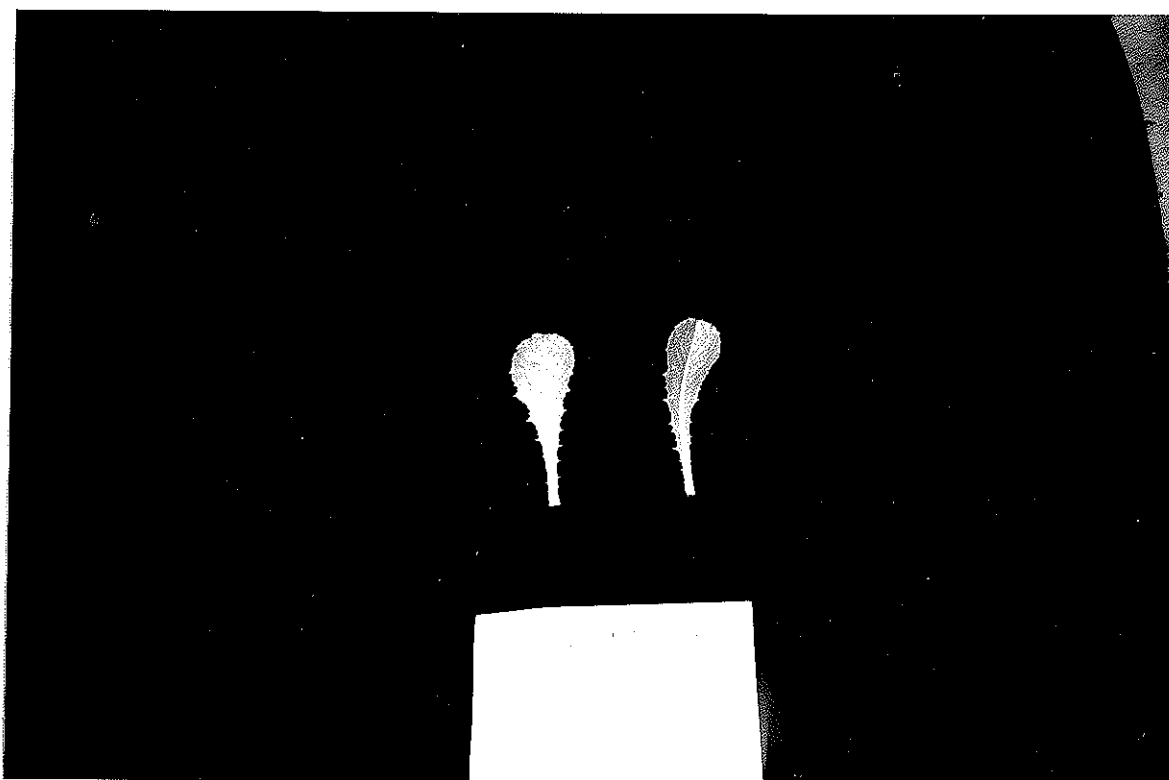
- ☐ 0 Pink Rib
☐ 0 Russet Spotting
☐ 0 Rusty Brown Discoloration
☐ 0 Internal Rib Necrosis (Blackheart, Gray Rib, Gray Streak)
☐ 0 Brown Stain

12. BIOCHEMICAL OR ELECTROPHORETIC MARKERS:

13. COMMENTS:

SUGGESTED CHECK VARIETIES

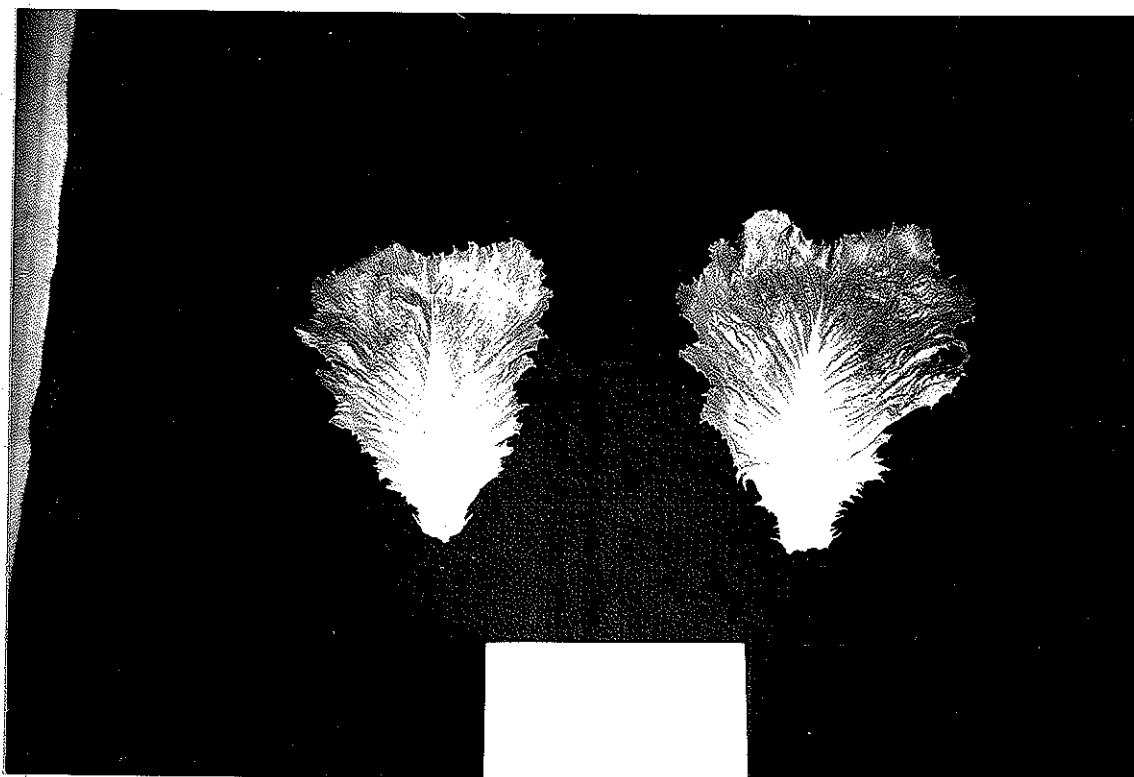
TYPE	CHECK VARIETY
1) CUTTING/LEAF	SALAD BOWL
2) BUTTERHEAD	DARK GREEN BOSTON
3) BIBB	BIBB
4) COS, OR ROMAINE	PARRIS ISLAND
5) GREAT LAKES GROUP	GREAT LAKES 659-700
6) VANGUARD GROUP	VANGUARD
7) IMPERIAL GROUP	VIVA
8) EASTERN GROUP	ITHACA
9) STEM	CELTUCE
10) LATIN	MATCHLESS



Fourth leaf from 20-day old seedlings, PSR-4569

'PS 6545691'

MAH
3/31/0



Harvest - mature leaf, PSR 4569

200000266



Harvest-mature plants of ~~PSR 4569~~

'PS 6545691'

NAH
3/31/2005

EXHIBIT E **STATEMENT OF THE BASIS OF OWNERSHIP**

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

<p>1. NAME OF APPLICANT(S)</p> <p>Seminis Vegetable Seeds, Inc.</p>	<p>2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER</p> <p>PSR 4569</p>	<p>3. VARIETY NAME</p> <p>PS 6545691 JRM 11/24/04</p>
<p>4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)</p> <p>37437 State Highway 16</p> <p>Woodland, CA 95695</p>	<p>5. TELEPHONE (include area code)</p> <p>(530) 669-6172</p>	<p>6. FAX (include area code)</p> <p>(530) 666-6791</p>
<p>7. PVPO NUMBER 2000000266</p>		

8. Does the applicant own all rights to the variety? Mark an "X" in appropriate block. If no, please explain. ☒ YES ☐ NO

9. Is the applicant (individual or company) a U.S. national or U.S. based company? ☒ YES ☐ NO
If no, give name of country

10. Is the applicant the original owner? ☒ YES ☐ NO If no, please answer one of the following:

a. If original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. national(s)?
☐ YES ☐ NO If no, give name of country

b. If original rights to variety were owned by a company(ies), is(are) the original owner(s) a U.S. based company?
☐ YES ☐ NO If no, give name of country

11. Additional explanation on ownership (if needed, use reverse for extra space):

PLEASE NOTE:

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, and marital or familial status. (Not all prohibited bases apply to all programs). Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C. 20250, or call 1-800-245-6340 (voice) or (202) 720-1127 (TDD). USDA is an equal employment opportunity employer.

STD-470-E (07-97) (Destroy previous editions).

Electronic version designed using WordPerfect InForms by USDA-AMS-IMB.